

## REMARKS/ARGUMENTS

Applicants amended claims 8, 22, and 36 to correct that the input is received at the server, not computer. This requirement is set forth in claims 7, 21, and 35 from which claims 8, 22, and 36 depend.

The Examiner rejected claims 1-42 as obvious (35 U.S.C. §103) over the Background Section of the Application, at pages 1 through pg. 3, line 12 (referred to herein as the “Background Section”) and “The SGML/XML Web Page” by Robin Cover (referred to herein as “Cover”). Applicants traverse this rejection for the following reasons.

Claims 1, 15, and 29 concern generating user interface output on an output device attached to a remote computer, wherein the remote computer communicates over a network to at least one server. The claims require: receiving an object including user interface components and data from one server; generating user interface output from the user interface components and data in the object; receiving a standard application program interfaces (API) that are a member of a set of standard APIs in a first format from at least one server over the network; converting the standard APIs in the first format to a user interface API in a second format; and executing the user interface API in the second format to manipulate the object and generate further user interface output from the components and data in the object.

The Examiner cited pg. 1, lines 1-20 of Cover as teaching the claim requirement of converting the standard APIs in the first format to a user interface API in a second format. The cited pg. 1 discusses how the DOM specification defines a platform neutral interface to allow programs to dynamically access and update content, structure and style of documents. The DOM provides a set of objects that can represent a structured document and interface to manipulate the documents contents.

Nowhere does the cited pg. 1 anywhere teach or suggest converting standard APIs that are a member of a set of standard APIs in a first format to a user interface API in a second format. Instead, the cited pg. 1 of Cover only mentions that the DOM specification defines objects and

executing the user interface API in the second format to manipulate the object and generate further user interface output from the components and data in the object.

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Nowhere does the cited pg. 1 anywhere teach or suggest converting standard APIs that are a member of a set of standard APIs in a first format to a user interface API in a second format. Instead, the cited pg. 1 of Cover only mentions that the DOM specification defines objects and interfaces that may be used to manipulate and access the objects. Nowhere is there any mention of converting standard APIs in a first format to user interface APIs in a second format. No conversion is mentioned, just a DOM interface that may be used to access a DOM object. For instance, nowhere does the cited Cover anywhere teach or suggest converting standard DOM interfaces, in a first format, to user interface APIs in a second format to manipulate the object.

The Examiner cited pg. 1, lines 1-21 of Cover as teaching the claim requirement of executing the user interface API in the second format to manipulate the object and generate further user interface output from the components and data in the object. (Office Action, pg. 2).

The cited page 1 of Cover discusses a DOM interface used to access a DOM object. Nowhere is there any mention of executing a user interface API in a second format. Instead, the cited Cover only mentions a standard DOM interface, not executing user interface APIs in a second format resulting from a conversion of the APIs in the standard first format.

Moreover, Cover teaches away from this claim requirement because Cover just discusses the DOM interfaces, and nowhere suggests executing a user interface API in a second format resulting from conversion from an API in a first format of standard APIs.

The Examiner further cited pg. 1, line 5 to pg. 2, line 3 of Cover. However, this cited section again just mentions the DOM platform neutral interface and objects. Nowhere is there any mention of executing a user interface API in a second format resulting from a conversion to manipulate the object. Instead, the cited Cover only discusses one set of interfaces, the DOM, and nowhere teaches or suggests transforming a standard API in a first format to a user interface API in a second format.

Accordingly, the claims 1, 15, and 29 are patentable over the combination of the cited Background of the Application and Cover because this combination does not teach all the claim limitations.

Claims 2-5, 16-19, and 30-33 are patentable over the cited combination because they depend from claims 1, 15, and 29, which are patentable over the cited art for the reasons discussed above. Moreover, certain of these dependent claims provide additional grounds of patentability over the cited art for the reasons discussed below.

Claims 3, 17, and 31 depend from claims 1, 15, and 29 and further require: receiving user input commands at the remote computer; generating user interface APIs in the second format to implement the user input commands; and executing the generated user interface APIs to manipulate the object and generate further user interface output from the components and data in the object.

The Examiner cited pg. 1 through pg. 2, line 3 of Cover as teaching the additional requirement of generating user interface APIs in the second format to implement the user input commands. (Office Action, pg. 3) Applicants traverse.

The cited pg. 1 of Cover discusses DOM interfaces that may be used to access and update the content of a DOM object. However, claims 3, 17, and 31 require that when receiving user input commands, user interface APIs in a second format are generated to implement user interface commands to manipulate the object. Nowhere does the cited Cover anywhere teach or

suggest that user interface APIs in a second format are generated to implement received user input commands.

Further, the cited Cover teaches away from these claim requirements because Cover discusses the platform independent DOM interfaces and objects, which are standard interfaces. The claims on the other hand concern generating user interface APIs in a second format, which are different than the APIs in the first format that are part of standard APIs in a first format. Thus, the generated user interface APIs in the second format are not standard APIs, such as the platform independent DOM interfaces.

Accordingly, claims 3, 17, and 31 provide additional grounds of patentability because the cited art does not teach the additional requirements of these claims.

Independent claims 6, 20, and 34 concern controlling from a server user interface output on an output device attached to a remote computer, wherein the server and remote computer communicate over a network, comprising: transmitting from the server an object to the remote computer including user interface components and data, wherein the remote computer generates user interface output from the user interface components and data in the object; and transmitting from the server to the remote computer standard application program interfaces (API) that are a member of a set of standard APIs in a first format, wherein the remote computer converts the standard APIs in the first format to user interface APIs in a second format to manipulate the object and generate further user interface output from the components and data in the object.

The Examiner cited the same sections of Cover above as teaching the claim requirement that the remote computer converts the standard APIs in the first format to user interface APIs in a second format to manipulate the object and generate further user interface output from the components and data in the object. (Office Action, pg. 3). Applicants traverse.

As discussed, the cited Cover discusses DOM objects and DOM interfaces that may be used to access and update content in the object, where the DOM provides a set of objects for representing HTML and XML documents and a standard interface for accessing and manipulating

them. Nowhere does the cited Cover anywhere teach or suggest converting standard APIs in the first format to user interface APIs in a second format to manipulate the object. For instance, nowhere does the cited Cover anywhere teach or suggest converting standard DOM interfaces to user interface APIs in a second format to manipulate the object. For these and other reasons discussed with respect to claims 1, 15, and 39, claims 6, 20, and 34 provide additional grounds of patentability over the cited art.

Claims 7-19, 21-33, and 35- 42 are patentable over the cited art because they depend either directly or indirectly from claims 1, 15, and 39, which are patentable over the cited art for the reasons discussed above. Moreover, certain of these dependent claims provide additional grounds of patentability over the cited art for the reasons discussed below.

Claims 7, 21, and 35 depend from claims 6, 20, and 34 and further require: generating a user interface at the server from a copy of the object transmitted to the remote computer; receiving input to control the user interface at the server; generating standard APIs in the first format to control the user interface according to the received input; and transmitting the generated standard APIs in the first format to the remote computer to control the user interface output generated at the remote computer.

The Examiner cited pg. 2, lines 10-20 of the Background Section of the Application as teaching the claim requirements of generating a user interface at the server from a copy of the object transmitted to the remote computer. (Office Action, pg. 3) Applicants traverse.

The cited Background Section discusses how a host may make calls, using the Abstract Window Toolkit (AWT), that are transported to a remote computer to interface with a Java application. The cited Background Section mentions that an X client can send requests to an X server to control the operation of a GUI interface. Nowhere does the cited Background Section anywhere teach or suggest generating a user interface at a server from a copy of the object transmitted to the remote computer. Instead, the cited Background section discusses the X-protocol, where a user interface and application are on separate machines. This cited

Background Section does not suggest that the server generates a user interface from a copy of the object transmitted to the remote computer including user interface components.

Moreover, claims 7, 21, and 35 further require that in response to input received at the server, standard APIs in the first format are generated to control the user interface and that the generated standard APIs in the first format are also transmitted to the remote computer to control the user interface generated at the remote computer. The cited Background Section discusses how a how an X client can issue requests to an X server to control the operation of the GUI interface. Nowhere does the cited Background Section anywhere teach or suggest that standard APIs are generated in response to input received to control the user interface at the server, where the generated standard APIs are then sent to the remote computer to control the user interface their.

Accordingly, claims 7, 21, and 35 provide additional grounds of patentability because the cited art does not teach the additional requirements of these claims.

Amended claims 8, 22, and 36 depend from claims 7, 21, and 35 and further require that the object includes images of a product, wherein the received input at the computer is to modify the presentation of the images of the product, and wherein the generated and transmitted standard APIs modify the presentation of the images of the product displayed in the generated user interface output at the remote computer. The Examiner cited pg. 2, lines 12-14 of the Background Section as teaching the additional requirements of these claims. (Office Action, pg. 4.). Applicant traverse.

The cited pg. 2 of the Background Section discusses how a client may send a request to the X server for a drawing. Nowhere does the cited Background Section anywhere teach or suggest that the object transmitted includes images of a product and that the received input at the server computer is to modify the presentation of the images of the product at the remote computer. Nowhere does the cited Background Section anywhere teach or suggest input received

at the server is used to modify the presentation of images of the product displayed at the remote computer.

Accordingly, claims 8, 22, and 36 provide additional grounds of patentability because the cited art does not teach the additional requirements of these claims.

Claims 9, 23, and 37 depend from claims 6, 20, and 34 and further require transmitting the object to additional remote computers and transmitting the standard APIs in the first format to the additional remote computers that received the object to manipulate the objects on all the remote computers and control the generation of user interface output on the remote computers. The Examiner cited pg. 2, lines 12-20 of the Background Section as teaching the additional requirements of these claims. (Office Action, pg. 4) Applicants traverse.

The cited pg. 2 of the Background Section discusses how an X server can accept requests from multiple clients and returns replies for information requests, user input and errors. Nowhere does the cited Background Section anywhere teach or suggest that an object is sent to multiple remote computers and that standard APIs are sent to the additional remote computer to manipulate the objects on all the remote computers to control user interface output on the remote computers. Instead, the cited Background Section just mentions that an X server can accept requests from multiple X clients and return information.

Accordingly, claims 9, 23, and 37 provide additional grounds of patentability because the cited art does not teach the additional requirements of these claims.

Claims 10, 24, and 38 depend from claims 9, 23, and 37 and further require: receiving, at the server, input from one of the remote computers to manipulate the object to modify the user interface output; generating, with the server, standard APIs to implement the manipulations to the object indicated in the received input; and transmitting the generated standard APIs to the remote computers to implement the manipulations of the object on the remote computers. The Examiner cited pg. 2, lines 10-20 of the Background Section as teaching the additional requirements of these claims. (Office Action, pg. 4) Applicants traverse.

The cited pg. 2 discusses how the X server can receive requests from multiple clients and return replies. Nowhere does the cited pg. 2 anywhere teach or suggest the claim requirement of generating at the server standard APIs to manipulate the object in response to input from one remote computer and then transmitting the generated standard APIs to remote computers to implement the manipulation fo the object. These steps are nowhere taught or remotely mentioned in the cited Background Section.

Accordingly, claims 10, 24, and 38 provide additional grounds of patentability because the cited art does not teach the additional requirements of these claims.

Claims 11, 25, and 39 depend from claims 9, 23, and 37 and further require that the object includes components and data of an interactive lesson, wherein the lesson is presented by transmitting standard APIs to the remote computers to generate user interface output defining the lesson from the components and data in the object at each remote computer. The examiner found that the Background Section's discussion of information renders obvious that the information is a lesson. (Office Action, pg. 4) Applicants traverse.

The cited Background Section only mentions that an X client sends requests for information to the X server. Nowhere does the cited Background Section anywhere teach or suggest that the object transmitted among the server and remote computers comprises an interactive lesson or that standard APIs are transmitted to the remote computers to generate output defining the lesson presented at the objects at each remote computer. Nowhere does the cited Background Section anywhere teach or suggest the claim requirements concerning providing an interactive lesson at remote computers as claimed.

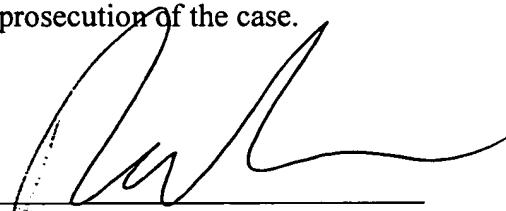
Accordingly, claims 11, 25, and 39 provide additional grounds of patentability because the cited art does not teach the additional requirements of these claims.

Conclusion

For all the above reasons, Applicant submits that the pending claims 1-42 are patentable over the art of record. Applicants have not added any claims. Nonetheless, should any additional fees be required, please charge Deposit Account No. 50-0585.

The attorney of record invites the Examiner to contact him at (310) 553-7977 if the Examiner believes such contact would advance the prosecution of the case.

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